

IN THE CLAIMS:

Please cancel claims 1-24 and add new claims 25-42. This listing of claims will replace all prior versions, and listings, of claims in the application:

STATUS OF THE CLAIMS:

1-24. (Canceled)

25. (New): An isolated nucleic acid molecule selected from the group consisting of:

a) a nucleic acid molecule comprising a nucleotide sequence which is at least 95% identical to the entire nucleotide sequence of SEQ ID NO:1, wherein the nucleic acid molecule encodes a polypeptide having fucosyltransferase activity, or a full complement thereof; and

b) a nucleic acid molecule which encodes a polypeptide comprising an amino acid sequence which is at least 95% identical to the entire amino acid sequence of SEQ ID NO:2, wherein the polypeptide has fucosyltransferase activity.

26. (New): An isolated nucleic acid molecule selected from the group consisting of:

a) a nucleic acid molecule comprising the nucleic acid sequence of SEQ ID NO:1 or SEQ ID NO:3, or a full complement thereof; and

b) a nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2, or a full complement thereof.

27. (New): An isolated nucleic acid molecule selected from the group consisting of:

b) a nucleic acid molecule consisting of the nucleic acid sequence of SEQ ID NO:1 or SEQ ID NO:3, or a full complement thereof; and

d) a nucleic acid molecule which encodes a polypeptide consisting of the amino acid sequence of SEQ ID NO:2, or a full complement thereof.

28. (New): The nucleic acid molecule of claim 25, further comprising vector nucleic acid sequences.

29. (New): The nucleic acid molecule of claim 26, further comprising vector nucleic acid sequences.

30. (New): The nucleic acid molecule of claim 27, further comprising vector nucleic acid sequences.

31. (New): The nucleic acid molecule of claim 25, further comprising nucleic acid sequences encoding a heterologous polypeptide.

32. (New): The nucleic acid molecule of claim 26, further comprising nucleic acid sequences encoding a heterologous polypeptide.

33. (New): The nucleic acid molecule of claim 27, further comprising nucleic acid sequences encoding a heterologous polypeptide.

34. (New): An isolated host cell which contains the nucleic acid molecule of claim 28.

35. (New): The host cell of claim 34 which is a mammalian host cell.

36. (New): An isolated host cell which contains the nucleic acid molecule of claim 29.

37. (New): The host cell of claim 36 which is a mammalian host cell.

38. (New): An isolated host cell which contains the nucleic acid molecule of claim 30.

39. (New): The host cell of claim 38 which is a mammalian host cell.

40. (New): A method for producing a polypeptide, comprising culturing the host cell of claim 34 under conditions in which the polypeptide encoded by the nucleic acid molecule is expressed.

41. (New): A method for producing a polypeptide, comprising culturing the host cell of claim 36 under conditions in which the polypeptide encoded by the nucleic acid molecule is expressed.

42. (New): A method for producing a polypeptide, comprising culturing the host cell of claim 38 under conditions in which the polypeptide encoded by the nucleic acid molecule is expressed.

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